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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MORRISON, THOMAS A

ART UNIT

PAPER NUMBER

3653

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,992

Applicant(s)

OUCHI ET AL.

Examiner

Thomas A. Morrison

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-5 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 4 is objected to because of the following informalities: (1) the recited "the upper surface" in line 10 should be -- an upper surface --; and (2) the recited "the ribs" in line 13 should be -- the special sheet ribs --. Appropriate correction is required.

2. Claim 9 is objected to because of the following informalities: (1) the recited "the leading edges" in line 5 should be -- leading edges --; (2) the recited "the upper surfaces" in line 10 should be -- upper surfaces --; and (3) the recited "the ribs" in line 13 should be -- the special sheet ribs --. Appropriate correction is required.

3. Claim 5 is objected to because of the following informalities: (1) the recited "an empty weight" in line 3 should be -- a weight --. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 2-4 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Publication No. 7-76438 (cited in applicants 10/29/03 IDS). In particular, Japanese Publication No. 7-76438 discloses all of the limitations of claims 2-4 and 7-9.

Regarding the independent claim 4, Figs. 1-7 show a sheet feeder (including 2 and 10) in an image forming apparatus (1) including

a manual sheet supply unit (11a) to supply a special sheet and a sheet other than the special sheet;

a conveying member (21) to convey the special sheet and the sheet other than the special sheet supplied from the manual sheet supply unit (11a) toward an image forming process unit (e.g., an image recording part in the English Abstract); and

a sheet guide (30) provided between the manual sheet supply unit (11a) and the conveying member (21), having special sheet ribs (Figs. 5 and 6) to control both sides of the special sheet that is inserted and guided by the special sheet ribs (Figs. 5 and 6), and to guide the sheet other than the special sheet by passing the sheet other than the special sheet on the upper surface of the special sheet ribs (Figs. 5 and 6), wherein the sheet guide (30) further has a pressing member (50) between the special sheet ribs (Figs. 5 and 6) that supports a side of the sheet other than the special sheet by pressing (Fig. 6), and descends when the special sheet is inserted between the ribs. By controlling the surface of the sheet in contact with the ribs, the whole sheet (i.e., both sides of the sheet) can be controlled. Also, Figs. 1 and 6 show the orientation of the pressing member (50) relative to the guide path for the sheets. When a sheet is conveyed by conveying member (21), such sheet will be inserted between the ribs (Fig. 6) and will move the pressing member (50) to the left in Fig. 1. In other words, the pressing member (50) will descend relative to the guide path (20) when such sheet is

inserted between the ribs. Thus, Japanese Publication No. 7-76438 meets all of the limitations of claim 4.

Regarding the independent claim 9, Figs. 1-7 and the attached detailed description of Japanese Publication No. 7-76438 disclose a sheet feeder in an image forming apparatus (including 2 and 10) having

a manual sheet supply unit (11a) to supply a special sheet and a sheet other than the special sheet on a manual sheet supply tray (11a);

aligning rollers (21 in Fig. 1 and numbered paragraphs [0005] and [0009]) to align the leading edges of the special sheet and the sheet other than the special sheet supplied from the manual sheet supply unit (11a) and convey in the image forming direction (Fig. 7); and

a sheet guide (30) provided between the manual sheet supply unit (11a) and the aligning rollers (21) having special sheet ribs (Figs. 5 and 6) to control both sides of the special sheet and to guide the sheet other than the special sheet by passing the sheet other than the special sheet on the upper surfaces of the special sheet ribs (Fig. 6), wherein the sheet guide (30) further has a pressing member (50) between the special sheet ribs (Figs. 5 and 6) that supports a side of the sheet other than the special sheet by pressing, and descends when the special sheet is inserted between the ribs. As explained above with regard to the rejection of claim 4, by controlling the surface of the sheet in contact with the ribs, the whole sheet (i.e., both sides of the sheet) can be controlled. Also, when a sheet is conveyed by aligning rollers (21), such sheet will be inserted between the ribs (Fig. 6) and will move the pressing member (50) to the left in

Fig. 1. In other words, the pressing member (50) will descend relative to the guide path (20) when such sheet is inserted between the ribs. Thus, Japanese Publication No. 7-76438 meets all of the limitations of claim 9.

Regarding claims 2 and 7, the numbered paragraph [0015] of the attached detailed description discloses that the manual sheet supply unit (11a) is configured to supply the special sheet and the sheet other than the special sheet. In other words, this paragraph discloses different thickness sheets. Inherently, these sheets will have different masses.

Regarding claims 3 and 8, Figs. 1 and 7 show that the manual sheet supply unit (11a) supplies the special sheet and the sheet other than the special sheet in a horizontal direction, and the (conveying member (21)/aligning rollers (21)) convey the special sheet and the sheet other than the special sheet in a vertical direction.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-4 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,149,045 (Kadono) in view of Japanese Publication No. 7-76438.

Regarding the independent claim 4, Figs. 1-7B of Kadono show a sheet feeder (including 12 and 16') in an image forming apparatus (column 1, lines 20-24) including

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a manual sheet supply unit (10a) to supply a special sheet and a sheet other than the special sheet;

a conveying member (14a and 14a) to convey the special sheet and the sheet other than the special sheet supplied from the manual sheet supply unit (10a) toward an image forming process unit (column 1, lines 20-24); and

a sheet guide (16') provided between the manual sheet supply unit (10a) and the conveying member (14a and 14a), having special sheet ribs (18') to control both sides of the special sheet that is inserted and guided by the special sheet ribs (18'), and to guide the sheet other than the special sheet by passing the sheet other than the special sheet on the upper surface of the special sheet ribs (18'). By controlling the surface of the sheet in contact with the ribs, the whole sheet (i.e., both sides of the sheet) can be controlled. However, Kadono does not show a pressing member, as claimed.

Regarding the independent claim 9, Figs. 1-7B of Kadono show (including 12 and 16') in an image forming apparatus (column 1, lines 20-24) having

a manual sheet supply unit (10a) to supply a special sheet and a sheet other than the special sheet on a manual sheet supply tray (10a);

aligning rollers (14a and 14a) to align the leading edges of the special sheet and the sheet other than the special sheet supplied from the manual sheet supply unit (10a) and convey in the image forming direction; and

a sheet guide (16') provided between the manual sheet supply unit (10a) and the aligning rollers (14a and 14a) having special sheet ribs (18') to control both sides of the special sheet and to guide the sheet other than the special sheet by passing the sheet

other than the special sheet on the upper surfaces of the special sheet ribs (18'). By controlling the surface of the sheet in contact with the ribs, the whole sheet (i.e., both sides of the sheet) can be controlled. However, Kadono does not show a pressing member, as claimed.

With regard to independent claims 4 and 9, Japanese Publication No. 7-76438 shows that it is well known to provide a sheet feeder with a pressing member (50) located between special sheet ribs (Figs. 5 and 6) that supports a side of the sheet other than the special sheet by pressing (Fig. 6). Such pressing member (50) ensures that sheets are pressed against the special sheet ribs. See English Abstract. It would have been obvious to one of ordinary skill in the art at the time of the invention, to provide the Kadono apparatus with a pressing member, to ensure that sheets conveyed through the Kadono apparatus are pressed against the ribs of the Kadono apparatus, as taught by Japanese Publication No. 7-76438. Providing the pressing member of Japanese Publication No. 7-76438 in the location of the ribs (18') of Kadono (i.e., the region labeled 16b) will result in the pressing member descending when a sheet is conveyed past the ribs. More specifically, the bent sheet in Fig. 1 will force the pressing member to descend, as claimed.

Regarding claims 3 and 8, Fig. 1 shows that the manual sheet supply unit (10a) supplies the special sheet and the sheet other than the special sheet in a horizontal direction, and the (conveying member (14a)/aligning rollers (14a and 14a)) convey the special sheet and the sheet other than the special sheet in a vertical direction. More specifically, at least part of each sheet will be pulled up near 18' in a vertical direction.

6. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,149,045 (Kadono) in view of Japanese Publication No. 7-76438 as applied to claims 4 and 9 above, and further in view of U.S. Patent No. 6,102,393 (Kida et al.). The combination of Kadono and Japanese Publication No. 7-76438 will result in a sheet feeder apparatus with a pressing member located across from the ribs (18') of Kadono to press sheets against the ribs (18') as explained above in the rejection of claims 4 and 9. Based on the curved shape of the guide (16') of Kadono and the placement of the pressing member, the weight of a bent sheet conveyed past the ribs (18') in Fig. 1 of Kadono will cause the pressing member to descend. In other words, the weight of the sheet will cause the pressing member to descend, as claimed. Also, Japanese Publication No. 7-76438 discloses that the pressing member (50) is made from plastic film, but does not specifically state that the pressing member (50) is polyester film.


The Kida et al. patent discloses that it is well known to provide a paper-handling device with paper guides (72) that are flexible, in that they are made from Mylar. Moreover, the dictionary definition of "Mylar" is "A trademark for a thin strong polyester film". See page 780 of Webster's II New Riverside University Dictionary. It would have been obvious to one of ordinary skill in the art at the time of the invention, to provide the apparatus of Kadono and Japanese Publication No. 7-76438 with a pressing member made from polyester, to ensure that the pressing member has sufficient flexibility characteristics, as taught by Kida et al.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on (571) 272-6944. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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